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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,490	07/27/2001	Hung-Ju Lee	SNY-P4516	9213

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MILLER PATENT SERVICES  
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RALEIGH, NC 27606

EXAMINER
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AN, SHAWN S

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 06/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/916,490

Applicant(s)

LEE, HUNG-JU

Examiner

Shawn S An

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) 16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 17-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Restriction/Election***

1. Applicants' election with traverse of GROUP I, consisting of claims 1-3 and 4-9 as in Paper No. 3 have been acknowledged.

The traversal is on the ground(s) that the GROUP I is used in many of the claims of GROUPS II and III, and the claims of GROUP I are subcombination claims that are generic to a large portion of the remaining claims of this application.

This is found persuasive with the exception of claim 16. Due to the relevancy of the claims of GROUPS I, II, and III, claims 1-15 and 17-32 will be examined together.

However, the prior art searching and a prosecution clearly would be an extra burden based on the claim 16 (non-generic claim). The burden is met by distinct diverse elements (Fig. 1), wherein one embodiment is not deemed obvious over any other GROUPS identified.

The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-15 and 17-32 are rejected under 35 U.S.C. 102(e) as being anticipated by Vetro et al (6,671,322 B2).

**Regarding claims 10 and 32**, Vetro et al discloses an electronic storage medium storing instructions which, when executed on a program processor (col. 5, lines 59-67), carry out a method of computing a drift reduction in a frame comprising blocks of quantized MPEG DCT coefficients, comprising:

computing a drift reference block of DCT coefficients (Fig. 15A);

mapping a block of video coefficients to a corresponding block of coefficients in the drift reduction frame using a motion vector (Fig. 6); and

adding the coefficients of the drift reference block to the coefficients of the block of quantized coefficients that have not been blocked to form a drift compensated block (col. 8, lines 58-62).

**Regarding claims 7, 17, 22, 23, and 28**, Vetro et al discloses an MPEG transcoder and a method of drift compensating a current frame having a motion vector, comprising:

means for dropping pixels from a reference frame of video (Fig. 10, 1050);

a decoder for decoding the dropped pixels to form a drift reference frame (1090, 1094);

mapping means for mapping a block of video coefficients to a corresponding block of coefficients in the drift reduction frame using a motion vector (Fig. 6); and

a drift compensator for compensating the block from the current frame using the block in the drift reference frame (col. 8, lines 58-62).

**Regarding claim 11**, Vetro et al discloses VLC of drift compensated block (Fig. 10, 1080).

**Regarding claim 12**, Vetro et al discloses repeating computing, mapping, and adding for each MV in a frame of MPEG video (Fig. 10).

**Regarding claims 1, 4, 13, 19, 25, and 29**, Vetro et al discloses the MPEG transcoder having drift compensation, and a method comprising:

processing a block of DCT coefficients by dropping at least one coefficient in the block (Fig. 10, 1050);

means for forming a dropped coefficient block containing the at least one coefficient (1050);

an inverse quantizer for inverse quantizing at least one coefficient to produce an inverse quantized dropped coefficient block (1090); and

an inverse DCT for inversely discrete cosine transforming the inverse quantized dropped coefficient block to produce the drift reduction block (1094).

**Regarding claims 8-9 and 14-15**, Vetro et al discloses DCT (1099) of the drift reduction block/frame, and quantizing (1070) DCT coefficients in the drift reduction frame.

**Regarding claims 18 and 24**, Vetro et al discloses a frame having MVs, wherein the mapping and compensating are carried out for each of the motion vectors (Fig. 10).

**Regarding claims 2-3, 5-6, 20-21, 26-27, and 30-31**, Vetro et al discloses dropping high frequency coefficients (col. 3, lines 54-61).

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

A) Ng (5,262,854), Lower resolution HDTV receivers.


B) Boyce et al (5,614,952), Digital video decoder for decoding digital high definition and/or digital standard definition television signals.

5. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawn S An whose telephone number is 703-305-0099. The examiner can normally be reached on Flex hours (10).

7. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



SSA  
Primary Patent Examiner  
6/17/04